Vitamin A (Retinol)
Dunaliella salina, vegetable origin
Helps in maintaining healthy skin and lessens the effects of photoaging

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<th>16 mg / 60 capsules</th>
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PRINCIPAL INDICATIONS:
Hair and nails, Skin (anti-aging, beauty of the skin), Vision

Vitamin A is a fat-soluble vitamin and antioxidant that helps the formation and maintenance of bone and soft tissues, teeth, mucous membranes and skin.

Vitamin A helps in maintaining healthy skin and lessens the effects of photoaging. Their consumption stimulates the production of melanin (pigment responsible for the coloration of the skin) and improves the hydration of the skin. In addition, it also promotes healthy hair by contributing to capillary regeneration.

This vitamin is obtained from foods of animal (preformed vitamin A) and plant origin (carotenoids). ß-Carotene is a provitamin A carotenoid: it is converted to retinal in the liver and, unlike vitamin A of animal origin, is not accumulated and only transformed into vitamin A when the body needs it.

Our provitamin A is 100% natural and is suitable for vegans, since it comes from Dunaliella salina, an algae that can accumulate up to 40% of its dry weight in ß-carotene. One dose of our product provides 100% NRVs* of vitamin A.

*NRVs: Nutrient Reference Values.

Health claims accepted by the following organisations:

- Vitamin A contributes to the maintenance of normal skin.
- Vitamin A contributes to the maintenance of normal vision.
- Vitamin A contributes to the normal function of the immune system.

Composition
INGREDIENTS:
1 capsule contains: 16 mg dry extract of Dunaliella salina (*Dunaliella salina* (Dunal) Teodoresco) algae standardised to contain 30% beta-carotene (i.e. 4.8 mg), corresponding to 800 µg RE* (vitamin A (100% NRVs**)).

*RE = all trans retinol equivalent.
**NRVs: Nutrient Reference Values.

OTHER INGREDIENTS:
Maltodextrin, vegetable-based capsule: hydroxypropyl methylcellulose.

ALLERGENS:
This product does not contain allergens (in accordance with Regulation (EU) No 1169/2011) nor genetically modified organisms.

FABRICATION AND GUARANTEE:
This food supplement is manufactured by a GMP-compliant laboratory (GMPs are the good manufacturing practice guidelines for the European pharmaceutical industry). Their active principle content is guaranteed through regular tests, which can be viewed online.

Use

DIRECTIONS:
1 capsule per day with half a glass of water at mealtime.

WARNINGS:
Not recommended for pregnant or lactating women. Do not exceed the recommended daily dose.

ADVICES:
Does not replace a varied and balanced diet and a healthy lifestyle. If you are undergoing medical treatment, seek your therapist's advice. For adult use only. Keep out of reach of young children.

STORAGE INSTRUCTIONS:
Store in a cool dry place away from sunlight.

Detailed information

Carotenoids and vitamin A

**Vitamin A** is an fat-soluble antioxidant vitamin that accumulates in the liver. This vitamin is essential for growth and development, helps to maintain good vision, protects the body against infection and **improves skin health** (1-2). It also plays a key role in the reproductive system, cell functions and immune system (3).

We can obtain two types of vitamin A from food: preformed vitamin A (retinol, retinyl ester, retinal, 3-dehydroretinol and retinoic acid) of animal origin, or **provitamin A carotenoids**, which are found in fruit and vegetables (4).

**Carotenoids** are pigments synthesised by algae, plants and photosynthetic bacteria. There are more than 600 types, and human beings acquire them through diet. Carotenoids include those known as **provitamin A carotenoids** (ALPHA-carotene, beta-carotene and beta-cryptoxanthin), which **are converted to retinol** in the liver (5). Provitamin A also has the advantage of converting to vitamin A only when the body needs it, avoiding any toxicity from consuming too much vitamin A.

**Vitamin A is necessary for the development and maintenance of several tissues**, including the skin and hair. Vitamin A has been found to induce the anagen, or hair growth, phase (6). Vitamin A also helps to **maintain healthy looking skin**: retinol applied topically helps to decrease the effects of photoaging (7), and one study has demonstrated the efficacy of administering vitamin A orally to treat sun-damaged skin. What is dunaliella?
**Dunaliella** (*Dunaliella salina* (Dunal) Teodoresco) is a green algae that tolerates high concentrations of salt. This algae contains carotenoids, primarily β-carotene (90% of the total carotenes) and also lutein (5%). When subjected to stress conditions, it can also hold large amounts of **β-carotene** in its chloroplasts (up to 40% of its dry weight) (9).

**Our product:** Dry extract of dunaliella algae standardised to contain 30% β-carotenes.

**Scientific name:** *Dunaliella salina* (Dunal) Teodoresco

**Part used:** Whole algae

**Bibliography**

4. http://lpi.oregonstate.edu/mic/vitamins/vitamin-A
7. http://lpi.oregonstate.edu/mic/micronutrients-health/skin-health/nutrient-index/vitamin-A